



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,169	07/12/2004	Siebe Tjerk De Zwart	NL020016	5392

24737 7590 08/23/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

DONG, DALEI

ART UNIT PAPER NUMBER

2879

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/501,169

Applicant(s)

DE ZWART ET AL.

Examiner

Dalei Dong

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because the abstract contains the word "comprising" and it should be changed to "including". Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

Art Unit: 2879

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

5. Claims 1-10 are objected to because of the following informalities:

Regarding to independent claim 1, in the last line of the independent claim 1,

Applicant claims "via said elements" this should be changed to "via said light-emitting

Art Unit: 2879

elements” in order to keep the claim language consistent. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,677,709 to Ma.

Regarding to claim 1, Ma discloses in Figures 1-3 and 9, a display device comprising: a first (120) and a second (170) set of electrodes, and a plurality of light-emitting elements (130), arranged between the sets of electrodes and being in electrical contact with the first set of electrodes (120), characterized by an electromechanically operable foil (180) having at least one electrically conducting side (190), the foil (combination of elements 180 and 190) being located between the light-emitting elements (130) and the second set of electrodes (170), with the conducting side (190) facing the light-emitting elements (130), and the foil (combination of elements 180 and 190) being arranged to place the conducting side (190) in contact with selected one of the light-

Art Unit: 2879

emitting elements (130), thereby closing a circuit from the first set of electrodes (120), via the elements (130), to the conductive side (190) (see column 5, lines 29-53).

Regarding to claim 2, Ma discloses in Figures 1-3 and 9, the foil (180) is made of an electrically conducting material (see column 4, line 60 to column 5, line 3).

Regarding to claim 3, Ma discloses in Figures 1-3, and 9, the foil (combination of elements 180 and 190) has one side coated with an electrically conducting layer (190).

Regarding to claim 4, Ma discloses in Figures 1-3 and 9, the foil (combination of elements 180 and 190) is displaceable towards electrically activated electrodes in the second set of electrodes (170, when the foil move back to its original position), thereby moving the conducting side (190) away from the light-emitting element (130) (see column 5, lines 15-23).

Regarding to claim 5, Ma discloses in Figures 1-3 and 9, the foil (combination of elements 180 and 190) is displaceable towards electrically activated electrodes in the first set of electrodes (120), thereby forcing the conducting side against the light-emitting elements (130) (see column 5, lines 13-53).

Regarding to claim 6, Ma discloses in Figures 1-3 and 9, the foil (combination of elements 180 and 190) is arranged to be forced against the light-emitting element (130)

except when attracted towards electrically activated electrodes in the second set of electrodes (170) (see column 5, lines 13-53).

Regarding to claim 7, Ma discloses in Figures 1-3 and 9, the first set of electrodes (120) comprises a first plurality of parallel strip electrodes (by forming the matrix shown in Figure 9), and the second set of electrodes (170) comprises a second plurality of parallel strip electrodes, in orthogonal relationship with the first plurality of electrodes (the overhang or movable part over the light-emitting element of the electrode 170), so that the sets of electrode form a grid of intersecting electrodes, and wherein the light-emitting elements (130) are located at intersections of electrodes (shown in Figure 2).

Regarding to claim 8, Ma discloses in Figures 1-3 and 9, the conducting side (190) is connected to ground (see column 5, lines 41-53).

Regarding to claim 9, Ma discloses in Figures 1-3 and 9, the light-emitting elements (130) are organic electroluminescent devices, such as OLEDs or PolyLEDs (see column 3, lines 15-33).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2879

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,677,709 to Ma in view of U.S. Patent No. 6,037,719 to Yap.

Regarding to claim 10, Ma discloses in Figures 1-3 and 9, a display device comprising: a first (120) and a second (170) set of electrodes, and a plurality of light-emitting elements (130), arranged between the sets of electrodes and being in electrical contact with the first set of electrodes (120), characterized by an electromechanically operable foil (180) having at least one electrically conducting side (190), the foil (180) being located between the light-emitting elements (130) and the second set of electrodes (170), with the conducting side (190) facing the light-emitting elements (130), and the foil (6) being arranged to place the conducting side (190) in contact with selected one of the light-emitting elements (130), thereby closing a circuit from the first set of electrodes (120), via the elements (130), to the conductive side (190).

However, Ma does not specifically disclose the light-emitting elements are non-organic LEDS.

Yap teaches in Figures 1-4, a display device comprising: a light-emitting element that is non-organic LED (see column 2, lines 46-56) for the purpose of reducing the cost of the display device.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the non-organic LED of Yap for the light-

emitting element of the display device of Ma in order to reduce the cost of the display device.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of a display device.

U.S. Patent No. 5,680,160 to LaPointe.

U.S. Patent No. 5,748,159 to Nishio.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.D.

July 14, 2005



Joseph Williams
Primary Examiner
Art Unit 2879